

(2)

Rush

Work Order ID 134158

134158

Page 1

Friday, July 03, 2015 3:46:32 PM

Item ID: D4037-3 Accept *N900040100* Setup Start *NS1*

Revision ID:

Item Name: Fwd Crossbeam Stop *NS2*

Start Date: 7/03/15 Start Qty: 2.00 *2*

Required Date: 7/03/15 Req'd Qty: 2.00 *2*

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: MLJ Date: JUL 06 2015 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4037	D								

100

0.00

100

Waterjet

FLOW CNC Waterjet

Memo

Cut blank as per file D4037-3_BLANK

0.00

(3)

✓

06/15/17

110

0.00

110

HAAS 1

HAAS CNC vertical machine #1

Memo

MACHINE AS PER FOLI FA878 AND DWG

FOLIO REV: AA

DWG REV: D

0.00

DEBURR

3

✓

DAS
20
9-89

15-07-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																														
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Page 2

Stop ***NR2***

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
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OTHER : ☐					

Work Order ID 134158

134158

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Friday, July 03, 2015 3:46:32 PM

Item ID: D4037-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Fwd Crossbeam
 Start Date: 7/03/15 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 7/03/15 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M 13545. Memo	0.00 0.00	START: 2:15 2:20 OVEN: T: 320 FINISH: 2:45 2:50			3	0	15-7-21	DAS 34 38
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				(3)			DAS 38 9-89 JUL 24 2015
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <u>ST 471</u> Memo	0.00 0.00				3			DAS 27 JUL 27 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Friday, July 03, 2015 3:46:32 PM

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Revision ID: Stop *NS2*
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180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

15/7/27 JF

SH 20150727

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																											
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Picklist Print

Friday, July 03, 2015 3:46:32 PM

Page 1

Work Order ID: 134158

134158

Parent Item: D4037-3

D4037-3

Parent Item Name: Fwd Crossbeam

Start Date: 7/03/15

Required Date: 7/03/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 09-12-14 JLM VERIFIED BY:EC IPP
REV:B AS PER REV B 10-04-19 JLM VERIFIED BY:EC IPP REV:D AS
PER ECN 11-554 11-05-24 JLM VERIFIED BY:DD IPP REV C:AS PER
ECN 10-563 10-09-28 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M6061T6B1.000X15.00 0		Purchased	No			100	f	9.0000	3.9	9			
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M6061T6B1 000X15 000

6061-T6 Bar 1.00 x 15.00

06/15/07/17

Location

Loc Qty

Loc Code

MAT

9

m132360

9

132773

11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

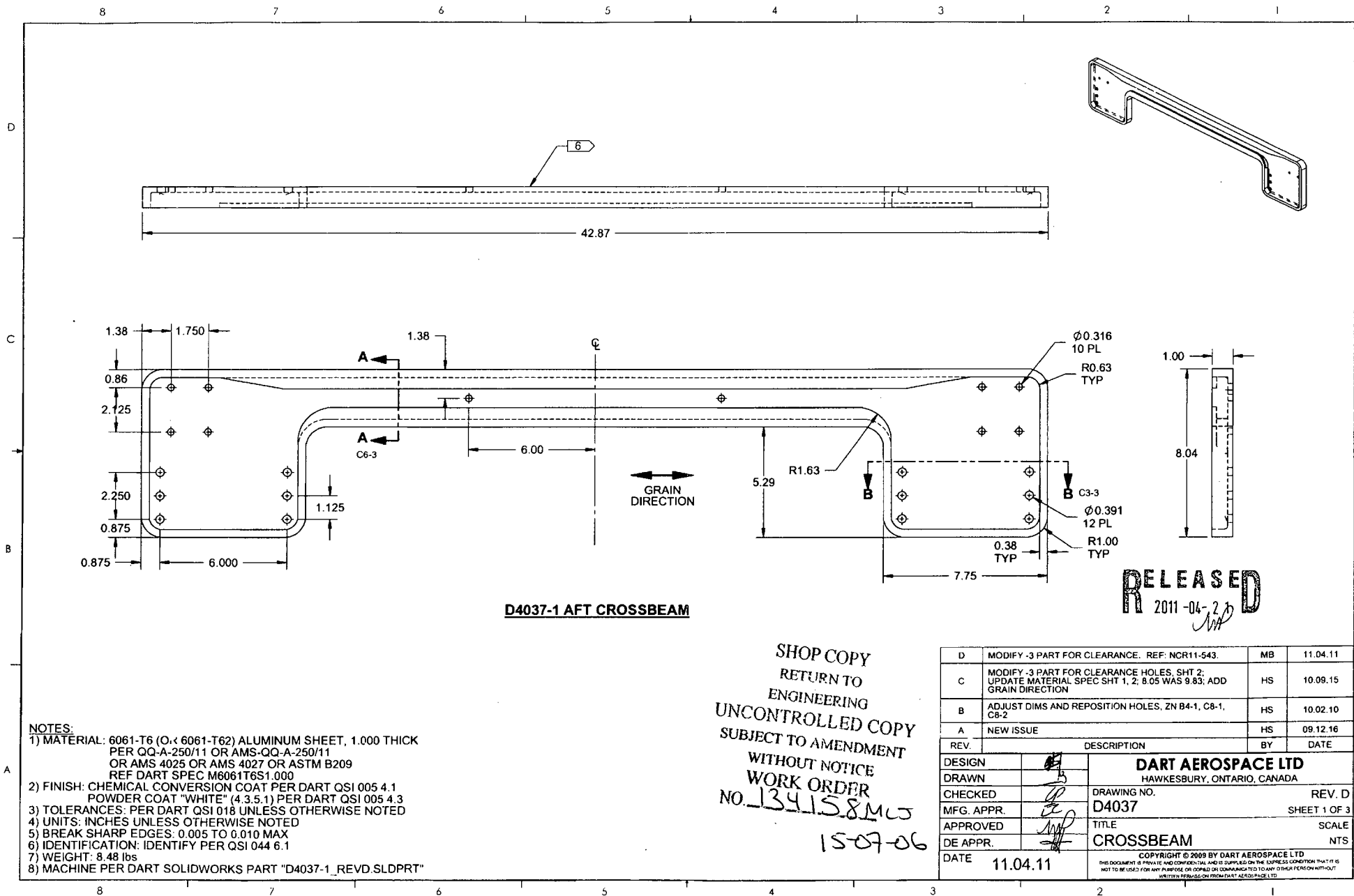
DART AEROSPACE LTD		Work Order: 134158
Description: Fwd Crossbeam		Part Number: D4037-3
Inspection Dwg: D4037	Rev: D	Page 1 of 1

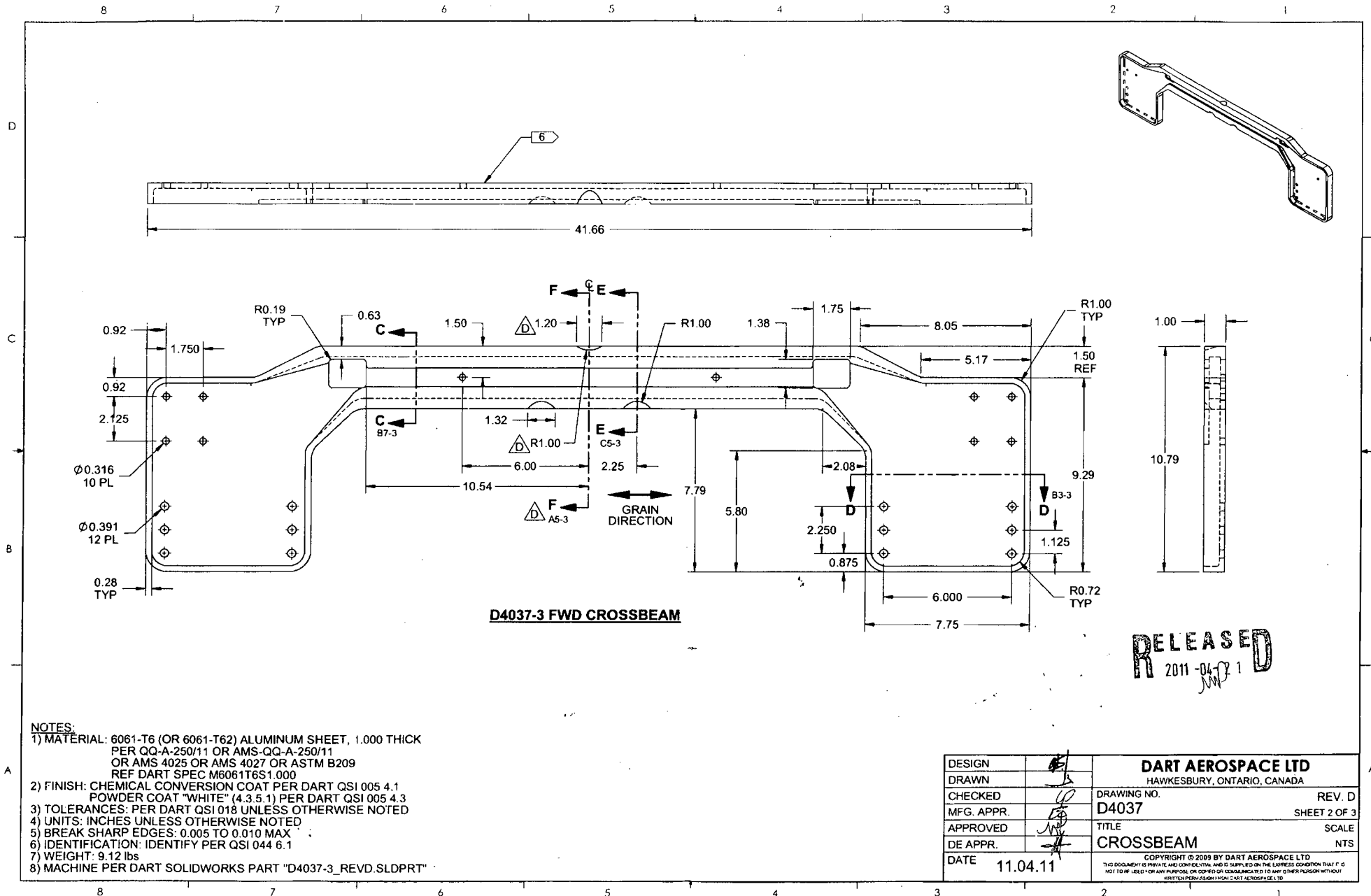
FIRST ARTICLE INSPECTION CHECKLIST

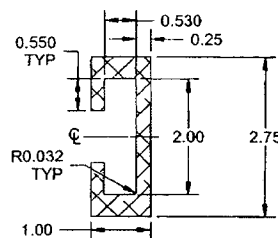
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
41.66	+/-0.030	41.640	✓		SLO1	Tape
0.92	+/-0.030	0.914	✓		SLO8	Vern
1.75	+/-0.030	1.750	✓			
0.92	+/-0.030	0.914	✓			
2.125	+/-0.010	2.128	✓			
Ø0.316	+0.006/-0.001	0.316	✓		gauge	Pins
Ø0.391	+0.006/-0.001	0.391	✓		"	
0.28	+/-0.030	0.282	✓		SLO8	
1.32	+/-0.030	1.335	✓		"	
7.79	+/-0.030	7.787	✓		Height gauge	
5.80	+/-0.030	5.800	✓		"	
2.250	+/-0.010	2.247	✓		SLO8	
0.875	+/-0.010	0.870	✓		"	
6.000	+/-0.010	5.996	✓		"	
7.75	+/-0.030	7.750	✓		SLO1	
1.125	+/-0.010	1.124	✓		SLO8	
9.29	+/-0.030	9.290	✓		SLO1	
1.75	+/-0.030	1.750	✓		SLO8	
1.38	+/-0.030	1.375	✓		"	
1.50	+/-0.030	1.498	✓		"	
0.63	+/-0.030	0.625	✓		"	
1.00	+/-0.030	1.020	✓		"	
10.79	+/-0.030	10.791	✓		Height gauge	
3.00	+/-0.030	3.000	✓		SLO8	
2.00	+/-0.030	2.005				
0.25	+/-0.030	0.255	✓			
0.530	+/-0.010	0.522	✓			
0.35	+/-0.030	0.375				
0.35	+/-0.030	0.375				
R0.13	+/-0.030	0.125	✓		Rad Gauge	

Measured by: DAS 20 9-89	Audited by: DAS 08 9-89	Preliminary Approval:
Date: 15-07-20	Date: 15/07/21	Date:

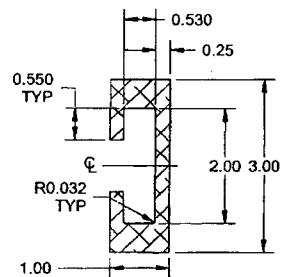
Rev	Date	Change	Revised by	Approved
A	10.06.08	New Issue	KJ	
B	10.10.07	Dimensions updated per Dwg Rev C	KJ	
C	11.06.21	Dwg Rev updated	KJ	



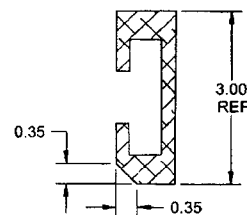




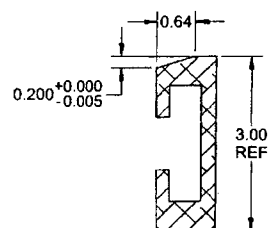
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SCALE 2X



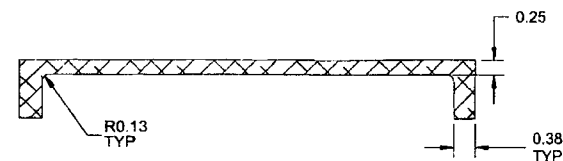
SECTION C-C B6-2
SCALE 2X



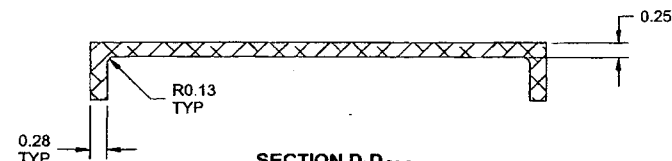
SECTION E-E C5-2
SCALE 2X



SECTION F-F B5-2
SCALE 2X



SECTION B-B B2-1
SCALE 2X



SECTION D-D B3-2
SCALE 2X

RELEASED
2011-04-11

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4037	REV. D
MFG. APPR.		TITLE	SHEET 3 OF 3
APPROVED		CROSSBEAM	SCALE
DE APPR.			NTS
DATE	11.04.11	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	